

Filepsc-148-UNV

~~SECRET~~

CONFIDENTIAL

25X1
25X1

February 24, 1954

25X1

Subject: Altitude check for RS-6 equipment)

Dear

25X1

At your request we are sending you our test reports resulting from the altitude checks of the RS-6 equipment. Although we had not taken any action as a result of these tests it was felt that the results were satisfactory and no corrective action will be necessary.

Very truly yours,

25X1

CPN/bf
Enc. 2

~~SECRET~~

CONFIDENTIAL

*John - Here are 2 copies of the original
altitude check on the RS6 equipment.*

May 6, 1953

25X1

MEMO TO: [REDACTED]

25X1

FROM: [REDACTED]

25X1

SUBJECT: Altitude Check of RS6 Equipment.

About a week ago I placed one complete RS6 equipment together with a motor driven keyer in the Terney chamber located in the Components test laboratory and submitted the system to the following conditions:

- A. Altitude: Sea level.
Temperature: 75° F.
System put into operation and keyed automatically at 40 words per minute.
- B. Altitude: Raised to 20,000 feet.
Temperature: Remains same at 75° F.
System was kept in operation while chamber was brought up to 20,000 feet. System kept at 20,000 feet for one hour. No change in either power output or wave form was observed.
- C. The system was turned off and the refrigeration unit was turned on. After about one hour the temperature reached -35° F. and the altitude 15,000 feet. The system was again turned on. Power output was still within limits but no keying wave form could be observed because the motor on the automatic keyer had frozen.
- D. The altitude was dropped back to sea level and the temperature raised slowly to -10° F. The keyer was put back into operation and no significant change in wave form was observed.
- E. Altitude raised to 20,000 feet in three (3) minutes; output and wave form both satisfactory.
- F. Chamber held at 20,000 feet for 10 minutes. Temperature was 0° F; output and wave form both satisfactory.
- G. Reduce altitude to sea level in three (3) minutes. Temperature 75° F.
No significant change in wave form and power output still within limits.

It was noted that throughout all steps of the test the power output varied by no more than 20%. However, when the altitude chamber was at sea level pressure and the units were accessible so that the tank circuits of the transmitter could be readjusted the power output changes seemed to be no greater than 10%.

After completion of the test all of the units were examined mechanically and no evidence of capacitor leakage or other damage was found.

ECA/rjh

MAKE OUT IN TRIPLICATE

SERIAL NO. CS-2325

DATE 2025-54

For CLASSIFIED Material Addressed to 25X1

I have personally received from (sender) Security Office

CLASSIFIED Material as identified below. I assume full responsibility for the safe handling, storage, and transmittal elsewhere of this material in accordance with existing regulations governing the handling of CLASSIFIED Material. The CLASSIFIED Material, including enclosures and attachments, is identified as follows: (In identifying Material avoid any reference which might cause the receipt form to become CLASSIFIED.)

CLASS.	DESCRIPTION	COPY	DATE	ORIGINATED BY
Secret	ltr re: Altitude check for RS-6 equipment attached: 2 copies test report	3cps	2-24-54	 25X1

ORIGINAL - to be signed personally by the recipient or his authorized delegate and returned to sender.

DUPLICATE - to be retained by recipient

TRIPLICATE - to be retained by sender for suspense file until original is returned.

JCB
 SIGNATURE OF RECIPIENT
3/5/54
 DATE RECEIVED

Postal Registry Number 751163